DOE Office of Science, Workforce Development for Teachers and Scientists (WDTS)

Visiting Faculty Program Research Collaboration Proposal Guidance

The Visiting Faculty Program (VFP) provides an opportunity for faculty to collaborate directly with research staff at DOE laboratories in order to create innovative new capabilities and to make discoveries germane to DOE science missions. The experience enables visiting faculty to develop skills that translate to programs at their home institutions, which in turn helps sustain the scientific vibrancy required to grow the STEM workforce pipeline in key DOE science mission areas.

VFP requires each faculty applicant to develop and submit a collaborative research project proposal. This proposal is co-written by the faculty applicant and the collaborating staff member of the DOE host laboratory, who together serve as the project's co-Principal Investigators.

Requirements for the formatting, content, submission, and evaluation of VFP proposals are provided below.

Proposal format

Element	Requirement
File type	Adobe Acrobat PDF document with ".pdf" extension after filename
Page margins	One-inch margins on all sides
Font size	12 point
Font type	Times or Times Roman; use symbolic font for math notation
Text spacing	Single spacing
Page headers	Left-side header: Your proposal title
and footers	Left-side footer: The faculty applicant's name
	Right-side footer: Page numbers
Figures	Proposals may contain embedded figures, but the entire proposal should be legible when printed in black and white; color figures that are not clear or understandable in black and white should be avoided. Figures must fit within the stated page limit.

Required proposal elements

1. Cover page (*one-page limit*) must include the following:

<u>Proposal title and abstract</u>: Provide a descriptive title of your proposed project and an abstract that concisely (no more than 250 words) summarizes the proposed project's scientific topic or problem, the approach, and the expected scientific results and impact.

<u>Experimental team</u>: Use a table to list the name, institution, email address, and role of each participant (including any students) in the proposed activities. This section may also briefly mention directly-relevant previous work done by the team members.

<u>Scientific facilities</u>: Briefly explain if any scientific user facilities will be used in your project. Please also comment if the proposed work is contingent upon winning a

user facility access proposal.

2. Proposal body (*six-page limit, not including references*) should communicate effectively the innovation and excitement of the proposed research ideas. It must include:

<u>Background:</u> Define the context for the proposal by relating it to other work, at the host laboratory and elsewhere, including any preliminary studies. Explain how the proposal is innovative and advances the state-of-the-art in the field. The following information should be provided:

- One to three references to key publications by others that describe the state-ofthe-art in the area of science proposed
- Identification, if possible, of connections of the proposed research to current and future programmatic activities at the national laboratory
- Identification of other current or recent Office of Science projects that are related to, or may have led to, the proposal
- Gaps in the current state of our knowledge.

Hypotheses and research objectives and goals: Clearly state your hypothesis. Concisely define your research goals and describe how accomplishment of the research goals would help to validate the hypothesis and bridge one or more gaps in the knowledge and understanding of the relevant S&T community.

Research approach, and expected scientific and technical results: The detailed science of the proposal should be described. Identify the rationale for the approach, the design of your activities and the methods you will use, and the expected results. Be clear about how your project will advance the state-of-the-art. While it is recognized that in the most innovative research and development it is difficult to predefine concrete milestones, the authors should nonetheless describe specific scientific accomplishments they might expect during the project.

<u>Key deliverables</u>: List the key deliverable(s) you expect to accomplish. Clearly state the scientific and technical impact of this project based upon the listed deliverables.

<u>References cited:</u> References are not included in the 6-page limit for the proposal body.

- **3. Curricula vitae** (*limit of two pages per investigator; vitae are not part of the six-page limit for the proposal body*). A two-page curriculum vita (CV) for each co-investigator must be submitted in PDF format as part of the application package. **A CV must be submitted for the national laboratory co-investigator as well as for the applying faculty member.** The purpose of these vitae is to demonstrate that the people to be supported on the proposed project have the requisite talent and experience to carry out the proposed research and development effort. Vitae should include lists of:
 - Example recent publications relevant to the subject of the proposal
 - Investigator's current projects
 - Recent collaborators.

Proposal submission

Proposals must be submitted by uploading PDF files into the VFP online application system.

Proposal review

All eligible proposals will be objectively studied by independent merit reviewers. An applicant must meet all eligibility criteria and have an application package comprising all required materials in order to be considered. The proposal materials uploaded and received through the electronic submission process will provide the sole basis for the review.

The merit review process evaluates three criteria, listed below in order of decreasing importance:

- 1. Scientific and/or technical merit of the project, including DOE mission relevancy and the influence that the results might have on the direction, progress, and thinking in relevant scientific fields of research; the likelihood of achieving valuable results; and the scientific innovation and originality indicated in the proposed research.
- 2. **Appropriateness of the proposed method or approach,** including the logic and feasibility of the research approaches and the soundness of the conduct of the research.
- 3. Competency of the personnel and adequacy of proposed resources, including the background, past performance, and potential of the investigator(s); and the research environment and facilities for performing the research.